

1983

ASPHALT

REPORT

1983 BITUMINOUS MATERIALS DATA ANALYSIS

MATERIALS BUREAU

FEBRUARY, 1984

A. SUMMARY OF DATA

- 1. TOTAL TYPE 1
- 2. TOTAL TYPE 2
- 3. TOTAL TYPE 3

B. SAMPLES BY REGION

- 1. TYPE 1
- 2. TYPE 2
- 3. TYPE 3

C. SAMPLES BY SOURCE

- 1. TYPE 1
- 2. TYPE 2
- 3. TYPE 3

D. TEST DATA SUMMARY

- 1. TYPE 1
- 2. TYPE 2
- 3. TYPE 3

E. SUMMARY OF DATA

F. SUMMARY OF DATA

G. SUMMARY OF DATA

- 1. TYPE 1
- 2. TYPE 2
- 3. TYPE 3

H. SUMMARY OF DATA

- 1. TYPE 1
- 2. TYPE 2
- 3. TYPE 3

I. SUMMARY OF DATA

- 1. TYPE 1
- 2. TYPE 2
- 3. TYPE 3

J. SUMMARY OF DATA

- 1. TYPE 1
- 2. TYPE 2
- 3. TYPE 3

K. SUMMARY OF DATA

- 1. TYPE 1
- 2. TYPE 2
- 3. TYPE 3

PLEASE NOTE THE DISTINCTION BETWEEN "SAMPLES" AND "TESTS".
A SAMPLE MAY BE TESTED FOR MANY DIFFERENT PROPERTIES. THIS CHARTER TWO REPORT

1983 ASPHALT MATERIALS DATA ANALYSIS

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NYS
Library
50 Wolf Road, POD 34
Albany, New York 12232

* PLEASE NOTE THE DISTINCTION BETWEEN "SAMPLE" AND "RECORD".
A SAMPLE MAY BE TESTED AND THEN RETESTED (CHECKTEST) THUS CREATING TWO RECORDS.

1. The following information was obtained from the files of the New York State Department of Social Services, Division of Child Welfare, and the New York State Department of Social Services, Division of Family Services, regarding the case of the child named [redacted] born [redacted] at [redacted] New York City, New York.

2. The child was born on [redacted] at [redacted] New York City, New York, to [redacted] and [redacted]. The child was born at [redacted] Hospital, New York City, New York.

3. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York.

4. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York.

5. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York.

6. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York.

7. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York.

8. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York.

9. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York.

10. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York. The child was placed in the custody of [redacted] on [redacted] at [redacted] New York City, New York.

NEW YORK
100 West Street, Room 34
New York, New York 10038

1983 ASPHALT MATERIALS ANALYSIS

THE UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

WATER RESOURCES DIVISION

1983 ASPHALT MATERIALS DATA
TOTAL RECORDS BY GRADE, RESULTS, ACTION
TEST TYPE=ALL, REQUEST AGENCY=ALL

GRADE	ITEM NO.	R E S U L T					A C T I O N			
		PASS (1)	S C (2)	INVALID SAMPLE (3)	FAIL (4)	SUM VALID (1+2+4)	ERROR (1,2, 3 or 4)	TOTAL (1+2+3+4 +ERROR)	ACCEPT	REJECT NO ACTION
AC-5	702-0200	28	4	0	3	35	0	35	30	0 5
AC-15	702-0400	185	10	0	2	197	0	197	190	2 5
AC-20	702-0500	1288	68	3	10	1366	0	1369	1271	6 92
85-100	702-0600	54	0	0	0	54	0	54	41	0 13
RS-1	702-3001	16	5	2	6	27	0	29	21	2 6
RS-2	702-3101	55	2	3	0	57	0	60	57	0 3
MS-2	702-3201	178	0	0	4	182	0	182	175	0 7
HFMS-2	702-3301	48	2	0	13	63	0	63	50	13 0
HFMS-2H	702-3401	1	0	6	1	2	0	8	1	0 7
HFRS-2	702-80	14	9	0	18	41	0	41	23	14 4
CRS-2	702-4101	43	2	7	0	45	0	52	45	0 7
CSS-1H	702-4501	0	0	0	4	4	0	4	0	2 2
CSS-1H	702-90**	99	10	2	14	123	0	125	117	4 4
HFMS-2H	702-90**	159	16	35	21	196	0	231	184	4 43
SS-1H	702-90**	32	2	0	0	34	0	34	33	0 1
FLUX		8	12	0	7	27	0	27	22	0 5
TOTALS		2208	142	58	103	2453	0	2511	2260	47 204

1983 ASPHALT MATERIALS DATA
TOTAL RECORDS BY GRADE, RESULTS, ACTION
TEST TYPE=NORMAL; REQUEST AGENCY=DOT NORMAL, MAINTENANCE, RECORD SAMPLE

GRADE	ITEM NO.	R E S U L T					A C T I O N				
		PASS (1)	S C (2)	INVALID SAMPLE (3)	FAIL (4)	SUM VALID (1+2+4)	ERROR (1, 2, 3 or 4)	TOTAL (1+2+3+4 +ERROR)	ACCEPT	REJECT	NO ACTION
AC-5	702-0200	12	0	0	0	12	0	12	9	0	3
AC-15	702-0400	169	5	0	1	175	0	175	169	1	5
AC-20	702-0500	1277	34	2	5	1316	0	1318	1233	3	82
85-100	702-0600	54	0	0	0	54	0	54	41	0	13
RS-1	702-3001	15	3	2	3	21	0	23	18	1	4
RS-2	702-3101	55	1	3	0	56	0	59	56	0	3
MS-2	702-3201	156	0	0	2	158	0	158	154	0	4
HFMS-2	702-3301	44	1	0	5	50	0	50	45	5	0
HFMS-2H	702-3401	0	0	6	0	0	0	6	0	0	6
HFRS-2	702-80	14	5	0	9	28	0	28	19	7	2
CRS-2	702-4101	43	1	7	0	44	0	51	44	0	7
CSS-1H	702-4501	0	0	0	2	2	0	2	0	1	1
CSS-1H	702-90**	99	5	1	7	111	0	112	108	2	2
HFMS-2H	702-90**	153	8	35	10	171	0	206	164	1	41
SS-1H	702-90**	32	1	0	0	33	0	33	32	0	1
FLUX		5	7	0	3	15	0	15	15	0	0
TOTALS		2128	71	56	47	2246	0	2302	2107	21	174

SAMPLES BY REQUESTING AGENCY
ALL TEST TYPES EXCEPT RETESTS

AGENCY	SUBTOTAL
DOT NORMAL	2049
DOTMAINT	182
RECSAMPLE	109
DOTENGR	17
GRAND TOTALS	2357

SAMPLES BY REQUESTING AGENCY
TEST TYPE NORMAL ONLY

AGENCY	SUBTOTAL
DOT NORMAL	2017
DOTMAINT	177
RECSAMPLE	108
DOTENGR	0
GRAND TOTALS	2302

1983 ASPHALT MATERIALS DATA
TOTAL SAMPLES BY PRIMESOURCE, GRADE

GRADE : MATL. DESIGNATION (702-)	AC-5 -0200	AC-15 -0400	AC-20 -0500	85-100 -0600	RS-1 -3001	RS-2 -3101	MS-2 -3201	HFMS-2 -3301	HFMS-2H -3401
PRIMESOURCE									
ALBANY ASP	0	0	0	0	6	42	34	11	0
ALLEGHANY BIT	0	0	0	0	0	0	14	0	0
ARCO PHILADELPHIA	0	0	12	0	0	0	0	0	0
ARCO THREE RIVERS	0	0	188	0	0	0	0	0	0
ASPHALT SERV JAMESTOWN	0	0	0	0	0	0	0	0	0
ASPHALT-ASSOC KEARNY	0	0	10	0	0	0	0	0	0
B.P. PETRO-CAN MONTREAL	0	0	0	7	0	0	0	0	0
B.P. PETRO-CAN OAKVILLE	27	43	0	0	0	0	0	0	0
BAKELITE QUEBEC	0	0	0	0	2	0	2	13	0
BIMASCO HAUPPAUGE	0	0	0	0	0	0	0	0	0
CENTRAL ASPH WATKINS GLEN	0	0	0	0	0	0	24	0	2
CHEVRON LYONS	0	0	106	0	0	1	0	7	0
CHEVRON MONTREAL CAN	0	0	0	0	0	0	19	0	0
CHEVRON TROY	0	0	68	0	0	0	26	0	0
CHEVRON PERTH AMBOY	0	0	99	0	0	0	0	0	0
CIBRO ALBANY	0	0	250	0	0	0	0	0	0
CIBRO THREE RIVERS	0	0	83	0	0	0	0	0	0
COLPROVIA NEW WINDSOR	0	0	0	0	0	0	0	0	0
CORTLAND CORTLAND	0	0	0	0	9	1	1	6	3
EXXON LINDEN	0	0	85	0	0	0	0	0	0
GULF CANADA MONTREAL	0	0	0	14	0	0	0	0	0
KRANTZ BUFFALO	0	0	0	0	0	0	0	0	0
MARATHON TONAWANDA	3	118	29	0	0	0	0	0	0
MIDLAND TONAWANDA	0	0	0	0	0	15	37	8	1
MOHAWK SCOTIA	0	0	0	0	0	0	0	0	0
MONACO PITTSFORD	0	0	12	0	0	0	0	0	0
NYS EMULSION BUFFALO	0	0	0	0	0	0	0	8	0
NYS EMULSION UTICA	0	0	0	0	6	0	0	0	0
NYS EMULSION WATERTOWN	0	0	0	0	0	0	0	0	0
OSWEGO CENTRAL SQUARE	0	0	0	0	0	0	1	0	0
PARCO STAMFORD	0	0	164	0	0	0	0	0	0
PECKHAM - PARCO	0	0	146	0	0	0	0	0	0
PETROFINA CAN MONTREAL	0	4	0	33	0	0	0	0	0
SHELL CANADA MONTREAL	0	0	14	0	0	0	0	0	0
UNITED REF WARREN	0	26	0	0	0	0	0	0	0
WEST BANK PENNSAUKEN	0	0	1	0	0	0	0	0	0
WEST BANK PERTH AMBOY	0	0	62	0	0	0	0	0	0
TOTALS	30	191	1329	54	23	59	158	53	6

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1983 ASPHALT MATERIALS DATA
TOTAL SAMPLES BY PRIMESOURCE, GRADE

GRADE :	DESIGNATION (702-)	HFRS-2 -80	SS-1 -3501	SS-1H -3601	CRS-1 -4001	CRS-2 -4101	CMS-2 -4201	CMS-2H -4301	CSS-1 -4401	CSS-1H -4501
PRIMESOURCE										
ALBANY ASP	ALBANY	4	0	0	0	0	0	0	0	0
ALLEGHANY BIT	BELMONT	0	0	0	0	0	0	0	0	0
ARCO	PHILADELPHIA	0	0	0	0	0	0	0	0	0
ARCO	THREE RIVERS	0	0	0	0	0	0	0	0	0
ASPHALT SERV	JAMESTOWN	0	0	0	0	5	0	0	0	0
ASPHALT-ASSOC	KEARNY	0	0	0	0	0	0	0	0	0
B.P. PETRO-CAN	MONTREAL	0	0	0	0	0	0	0	0	0
B.P. PETRO-CAN	OAKVILLE	0	0	0	0	0	0	0	0	0
BAKELITE	QUEBEC	0	0	0	0	0	0	0	0	0
BIMASCO	HAUPPAUGE	0	0	0	0	0	0	0	0	0
CENTRAL ASPH	WATKINS GLEN	0	0	0	0	1	0	0	0	0
CHEVRON	LYONS	9	0	0	0	12	0	0	0	2
CHEVRON	MONTREAL CAN	0	0	0	0	0	0	0	0	0
CHEVRON	TROY	0	0	0	0	0	0	0	0	0
CHEVRON	PERTH AMBOY	0	0	0	0	0	0	0	0	0
CIBRO	ALBANY	0	0	0	0	0	0	0	0	0
CIBRO	THREE RIVERS	0	0	0	0	0	0	0	0	0
COLPROVIA	NEW WINDSOR	0	0	0	0	0	0	0	0	0
CORTLAND	CORTLAND	0	0	0	0	0	0	0	0	0
EXXON	LINDEN	0	0	0	0	0	0	0	0	0
GULF CANADA	MONTREAL	0	0	0	0	0	0	0	0	0
KRANTZ	BUFFALO	0	0	0	0	17	0	0	0	0
MARATHON	TONAWANDA	0	0	0	0	0	0	0	0	0
MIDLAND	TONAWANDA	3	0	0	0	16	0	0	0	0
MOHAWK	SCOTIA	0	0	0	0	0	0	0	0	0
MONACO	PITTSFORD	0	0	0	0	0	0	0	0	0
NYS EMULSION	BUFFALO	12	0	0	0	0	0	0	0	0
NYS EMULSION	UTICA	0	0	0	0	0	0	0	0	0
NYS EMULSION	WATERTOWN	0	0	0	0	0	0	0	0	0
OSWEGO	CENTRAL SQUARE	0	0	0	0	0	0	0	0	0
PARCO	STAMFORD	0	0	0	0	0	0	0	0	0
PECKHAM - PARCO	ATHENS	0	0	0	0	0	0	0	0	0
PETROFINA CAN	MONTREAL	0	0	0	0	0	0	0	0	0
SHELL CANADA	MONTREAL	0	0	0	0	0	0	0	0	0
UNITED REF	WARREN	0	0	0	0	0	0	0	0	0
WEST BANK	PENNSAUKEN	0	0	0	0	0	0	0	0	0
WEST BANK	PERTH AMBOY	0	0	0	0	0	0	0	0	0
TOTALS		28	0	0	0	51	0	0	0	2

1983 ASPHALT MATERIALS DATA
TOTAL SAMPLES BY PRIMESOURCE, GRADE

GRADE :	DESIGNATION	(702-)	MC-250 -22	CRS-1H** -90	CSS-1H** -90	HFMS-2H** -90	SS-1H** -90	FLUX	ERROR (BLANK, 0)	TOTAL
PRIMESOURCE										
ALBANY ASP	ALBANY		0	0	0	78	0	0	0	175
ALLEGHANY BIT	BELMONT		0	0	1	0	0	0	0	15
ARCO	PHILADELPHIA		0	0	0	0	0	0	0	12
ARCO	THREE RIVERS		0	0	0	0	0	0	0	188
ASPHALT SERV	JAMESTOWN		0	0	0	0	0	0	0	5
ASPHALT-ASSOC	KEARNY		0	0	0	0	0	0	0	10
B.P. PETRO-CAN	MONTREAL		0	0	0	0	0	0	0	7
B.P. PETRO-CAN	OAKVILLE		0	0	0	0	0	0	0	70
BAKELITE	QUEBEC		0	0	0	0	7	0	0	24
BIMASCO	HAUPPAUGE		0	0	2	3	0	0	0	5
CENTRAL ASPH	WATKINS GLEN		0	0	0	12	0	0	0	39
CHEVRON	LYONS		0	0	37	0	26	13	0	213
CHEVRON	MONTREAL CAN		0	0	0	0	0	0	0	19
CHEVRON	TROY		0	0	0	0	0	0	0	94
CHEVRON	PERTH AMBOY		0	0	0	0	0	0	0	99
CIBRO	ALBANY		0	0	0	0	0	0	0	250
CIBRO	THREE RIVERS		0	0	0	0	0	3	0	86
COLPROVIA	NEW WINDSOR		0	0	0	5	0	0	0	5
CORTLAND	CORTLAND		0	0	0	36	0	0	0	56
EXXON	LINDEN		0	0	0	0	0	0	0	85
GULF CANADA	MONTREAL		0	0	0	0	0	0	0	14
KRANTZ	BUFFALO		0	0	0	0	0	0	0	17
MARATHON	TONAWANDA		0	0	0	0	0	4	0	154
MIDLAND	TONAWANDA		0	0	0	48	0	0	0	128
MOHAWK	SCOTIA		0	0	19	0	0	0	0	19
MONACO	PITTSFORD		0	0	0	0	0	0	0	12
NYS EMULSION	BUFFALO		0	0	0	22	0	0	0	42
NYS EMULSION	UTICA		0	0	0	1	0	0	0	7
NYS EMULSION	WATERTOWN		0	0	0	3	0	0	0	3
OSWEGO	CENTRAL SQUARE		0	0	53	0	0	0	0	54
PARCO	STAMFORD		0	0	0	0	0	0	0	164
PECKHAM - PARCO	ATHENS		0	0	0	0	0	0	0	146
PETROFINA CAN	MONTREAL		0	0	0	0	0	0	0	37
SHELL CANADA	MONTREAL		0	0	0	0	0	0	0	14
UNITED REF	WARREN		0	0	0	0	0	0	0	26
WEST BANK	PENNSAUKEN		0	0	0	0	0	0	0	1
WEST BANK	PERTH AMBOY		0	0	0	0	0	0	0	62
TOTALS			0	0	112	208	33	20	0	2357

**TACK COAT

1983 ASPHALT MATERIALS DATA
TOTAL CEMENT DATA RECORDS BY CODING PARAMETERS

	TEST TYPE	REQ AGENCY	TOTAL
GRADE AC-5	1	1	9
	1	3	3
	2	1	5
	3	1	14
	4	4	4
SUBTOTAL			35
GRADE AC-15			
	1	1	160
	1	2	10
	1	3	5
	2	1	6
	3	1	9
	3	2	4
	4	4	3
SUBTOTAL			197
GRADE AC-20			
	1	1	1238
	1	2	1
	1	3	79
	2	1	34
	2	3	6
	3	1	7
	3	2	1
	4	3	1
	4	4	2
SUBTOTAL			1369
GRADE 85-100			
	1	1	38
	1	2	2
	1	3	14
SUBTOTAL			54
TOTAL			1655

TEST RECORD CODING PARAMETERS
=====

REQUESTING AGENCY :

- 1 - DOT NORMAL
- 2 - DOT MAINTENANCE
- 3 - RECORD SAMPLING
- 4 - DOT ENGINEERING
- 5 - DOT ER&DB
- 6 - THRUWAY
- 7 - OTHER
- 8 - UNKNOWN/ERROR

TEST TYPE :

- 1 - NORMAL
- 2 - CHECK
- 3 - ADDITIONAL GROUP
- 4 - INFO SAMPLE
- 5 - UNKNOWN/ERROR

Card 1

BR 170 Serial No.

 14 Month Day Year 19

 Date Rec'd / /

 Date Sampled / /

 Primary Source (See list)

 Lot Number

 Grade -

 Materials Designation

 Region

 Mixing plant code (See list)

 Emulsions No. in Group

Cont. No.

Card 2

Requesting Agency

9 (Circle Agency)

 DOT Normal 1 ☐ DOT Maintenance 2 ☐ Record Sampling 3 ☐ DOT Engineering 4 ☐ DOT Engr. Research 5 ☐ Thruway 6 ☐ Other 7 ☐

Crude Source

 Normal 1 ☐ Canadian Mid Continent 2 ☐ Boscan 3 ☐ Other 4 ☐

11 (Circle Result)

 Specifications met 1 ☐ Substantial Conformance 2 ☐ Invalid Sample 3 ☐ Below Acceptable Standards 4 ☐

Test Number

 L B

 Test Date / /

 Test Type

 Add'l Gp 3 Info Sample 4

 Refer to

Tested by

 Line No

Checked by

ITEM	ANALYSIS	1	2	Sat.	Unsat.
Particle Charge 8 m A. (1, 1)	44 <input type="text"/>	45 <input type="text"/>	46 <input type="text"/>	47 <input type="text"/>	48 <input type="text"/>
Specific Gravity @ 60F	49 <input type="text"/>	50 <input type="text"/>	51 <input type="text"/>	52 <input type="text"/>	53 <input type="text"/>
Specific Gravity @ 77F	54 <input type="text"/>	55 <input type="text"/>	56 <input type="text"/>	57 <input type="text"/>	58 <input type="text"/>
Homogeneity	59 <input type="text"/>	60 <input type="text"/>	61 <input type="text"/>	62 <input type="text"/>	63 <input type="text"/>
Water %	64 <input type="text"/>	65 <input type="text"/>	66 <input type="text"/>	67 <input type="text"/>	68 <input type="text"/>
Solubility % in	69 <input type="text"/>	70 <input type="text"/>	71 <input type="text"/>	72 <input type="text"/>	73 <input type="text"/>
Flash Point (°F)	74 <input type="text"/>	75 <input type="text"/>	76 <input type="text"/>	77 <input type="text"/>	78 <input type="text"/>
Softening Pt. R&B (°F)	79 <input type="text"/>	80 <input type="text"/>	81 <input type="text"/>	82 <input type="text"/>	83 <input type="text"/>

Card 4

ITEM	ANALYSIS	1	2	Sat.	Unsat.
THIN FILM OVEN TEST: 8	9 <input type="text"/>	10 <input type="text"/>	11 <input type="text"/>	12 <input type="text"/>	13 <input type="text"/>
% Difference (1, 1)	14 <input type="text"/>	15 <input type="text"/>	16 <input type="text"/>	17 <input type="text"/>	18 <input type="text"/>
Penetration @ 77F 100g, 5 Sec. (.1mm)	19 <input type="text"/>	20 <input type="text"/>	21 <input type="text"/>	22 <input type="text"/>	23 <input type="text"/>
[Indicate striking can bottom with "1" in fourth box]	24 <input type="text"/>	25 <input type="text"/>	26 <input type="text"/>	27 <input type="text"/>	28 <input type="text"/>
% original pen @ 77F	29 <input type="text"/>	30 <input type="text"/>	31 <input type="text"/>	32 <input type="text"/>	33 <input type="text"/>
Ductility @ 60F 5cm/min. (cm)	34 <input type="text"/>	35 <input type="text"/>	36 <input type="text"/>	37 <input type="text"/>	38 <input type="text"/>
Kinematic Viscosity @ 275F (C. Stokes)	39 <input type="text"/>	40 <input type="text"/>	41 <input type="text"/>	42 <input type="text"/>	43 <input type="text"/>
Absolute Viscosity 140F, 30cm. (poise)	44 <input type="text"/>	45 <input type="text"/>	46 <input type="text"/>	47 <input type="text"/>	48 <input type="text"/>
Viscosity Ratio 60C [after IFOT before TFOT]	49 <input type="text"/>	50 <input type="text"/>	51 <input type="text"/>	52 <input type="text"/>	53 <input type="text"/>

STANDARD LOSS:

Loss of Heating @ 325F (%)	44 <input type="text"/>	45 <input type="text"/>	46 <input type="text"/>	47 <input type="text"/>	48 <input type="text"/>
% orig. pen. @ 77F	49 <input type="text"/>	50 <input type="text"/>	51 <input type="text"/>	52 <input type="text"/>	53 <input type="text"/>

DISTILLATE [EMULSIONS]:

Residue (%)	54 <input type="text"/>	55 <input type="text"/>	56 <input type="text"/>	57 <input type="text"/>	58 <input type="text"/>
Petroleum Spirits (%)	59 <input type="text"/>	60 <input type="text"/>	61 <input type="text"/>	62 <input type="text"/>	63 <input type="text"/>
Float Test @ 140F (Sec.)	64 <input type="text"/>	65 <input type="text"/>	66 <input type="text"/>	67 <input type="text"/>	68 <input type="text"/>

by

date

Card 5

ITEM	ANALYSIS	1	2	Sat.	Unsat.
Kinematic Viscosity @ 140F (C. Stokes)	8 <input type="text"/>	9 <input type="text"/>	10 <input type="text"/>	11 <input type="text"/>	12 <input type="text"/>
Kinematic Viscosity @ 275F (C. Stokes)	13 <input type="text"/>	14 <input type="text"/>	15 <input type="text"/>	16 <input type="text"/>	17 <input type="text"/>
Absolute Viscosity @ 140F, 30cm. (poise)	18 <input type="text"/>	19 <input type="text"/>	20 <input type="text"/>	21 <input type="text"/>	22 <input type="text"/>
Penetration @ 77F 100g, 5 Sec. (.1mm)	23 <input type="text"/>	24 <input type="text"/>	25 <input type="text"/>	26 <input type="text"/>	27 <input type="text"/>
[Indicate striking can bottom with "1" in fourth box]	28 <input type="text"/>	29 <input type="text"/>	30 <input type="text"/>	31 <input type="text"/>	32 <input type="text"/>
Penetration @ 39.2F 200g, 60 Sec. (.1mm) AVG.	33 <input type="text"/>	34 <input type="text"/>	35 <input type="text"/>	36 <input type="text"/>	37 <input type="text"/>
Pen. Pen at 39.2F Ratio Pen at 77F	38 <input type="text"/>	39 <input type="text"/>	40 <input type="text"/>	41 <input type="text"/>	42 <input type="text"/>
Ductility @ 60F 5 cm/min. (cm)	43 <input type="text"/>	44 <input type="text"/>	45 <input type="text"/>	46 <input type="text"/>	47 <input type="text"/>
pH	48 <input type="text"/>	49 <input type="text"/>	50 <input type="text"/>	51 <input type="text"/>	52 <input type="text"/>
Demulsibility (n/50) % by wt.	53 <input type="text"/>	54 <input type="text"/>	55 <input type="text"/>	56 <input type="text"/>	57 <input type="text"/>
Demulsibility (n/10) % by wt.	58 <input type="text"/>	59 <input type="text"/>	60 <input type="text"/>	61 <input type="text"/>	62 <input type="text"/>
Stripping Test	63 <input type="text"/>	64 <input type="text"/>	65 <input type="text"/>	66 <input type="text"/>	67 <input type="text"/>
Stone Coating	68 <input type="text"/>	69 <input type="text"/>	70 <input type="text"/>	71 <input type="text"/>	72 <input type="text"/>
Lot Year	73 <input type="text"/>	74 <input type="text"/>	75 <input type="text"/>	76 <input type="text"/>	77 <input type="text"/>

Card 6

FINAL ACTION	1	2	3
ACCEPT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REJECT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NO ACTION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B. TECHNICAL DATA

1983 ASPHALT MATERIALS ANALYSIS

1983 ASPHALT MATERIALS DATA
CEMENT DATA SUMMARY STATISTICS

GRADE	RECORDS*	N	PEN 77F		AB VIS 140F		KIN VIS 275F	
			MEAN	SD	MEAN	SD	MEAN	SD
AC-5	12	12	164.000	12.813	536.667	33.115		
AC-15	175	175	84.914	7.036	1384.966	117.807		
AC-20	1318	1317	77.212	9.599	1967.978	216.089		
85-100	54	54	90.037	3.608			330.278	18.727

* INCLUDES ALL REQUESTING AGENCIES, TEST-TYPE=1(NORMAL)
BEFORE DATA SCREENING FOR BLANKS, ETC.

HISTOGRAMS OF VISCOSITY

1983 ASPHALT CEMENT DATA

- a. AC-5
- b. AC-15
- c. AC-20
- d. 85-100

a. 1983 ASPHALT MATERIALS DATA GRADE AC-5

HISTOGRAM OF VARIABLE		AVIS140		SYMBOL		COUNT		MEAN		ST.DEV.							
				X		12		536.667		33.115							
INTERVAL	NAME	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
*200.000	+																
*300.000	+																
*400.000	+																
*500.000	+X																
*600.000	+XXXXXXX																
*700.000	+																
*800.000	+																
*900.000	+																
*1000.00	+																
*1100.00	+																
*1200.00	+																
*1300.00	+																
*1400.00	+																
*1500.00	+																
*1600.00	+																
*1700.00	+																
*1800.00	+																
*1900.00	+																
*2000.00	+																
*2100.00	+																
*2200.00	+																
*2300.00	+																
*2400.00	+																
*2500.00	+																
*2600.00	+																
*2700.00	+																
*2800.00	+																
*2900.00	+																
*3000.00	+																
*3100.00	+																
*3200.00	+																
*3300.00	+																
*3400.00	+																
*3500.00	+																
*3600.00	+																
*3700.00	+																
*3800.00	+																
*3900.00	+																
*4000.00	+																
*LAST	+																

THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

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LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

HISTOGRAM OF VARIABLE	AVIS140	SYMBOL	COUNT	MEAN	ST. DEV.
		X	175	1384.966	117.807

[illegible]

HISTOGRAM OF VARIABLE

AVIS140

SYMBOL	COUNT
X	1317

MEAN
1967.978

ST. DEV.
216.089

[illegible]

HISTOGRAM OF VARIABLE	KVIS275		ST. DEV.
	SYMBOL	COUNT	MEAN
	X	54	330.278
			18.727

INTERVAL NAME	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	FREQUENCY INT.	PERCENTAGE CUM. INT.
*100.000	+																0	0.0
*150.000	+																0	0.0
*200.000	+																0	0.0
*250.000	+																0	0.0
*300.000	+																0	0.0
*300.000	+	XX															2	3.7
*350.000	+	XXXXXXXXXXXXXXXXXXXX															42	77.8
*350.000	+	XXXXXXXXXXXXXXXXXXXX															44	81.5
*400.000	+	XXXXXXXXXX															10	18.5
*400.000	+	XXXXXXXXXX															54	100.0
*450.000	+																0	0.0
*450.000	+																54	100.0
*500.000	+																0	0.0
*500.000	+																54	100.0
*550.000	+																0	0.0
*550.000	+																54	100.0
*600.000	+																0	0.0
*600.000	+																54	100.0
*650.000	+																0	0.0
*650.000	+																54	100.0
*700.000	+																0	0.0
*700.000	+																54	100.0
*750.000	+																0	0.0
*750.000	+																54	100.0
*800.000	+																0	0.0
*800.000	+																54	100.0
*850.000	+																0	0.0
*850.000	+																54	100.0
*900.000	+																0	0.0
*900.000	+																54	100.0
*950.000	+																0	0.0
*950.000	+																54	100.0
*1000.00	+																0	0.0
*1000.00	+																54	100.0
*1050.00	+																0	0.0
*1050.00	+																54	100.0
*1100.00	+																0	0.0
*1100.00	+																54	100.0
*1150.00	+																0	0.0
*1150.00	+																54	100.0
*1200.00	+																0	0.0
*1200.00	+																54	100.0
*1250.00	+																0	0.0
*1250.00	+																54	100.0
*1300.00	+																0	0.0
*1300.00	+																54	100.0
*1350.00	+																0	0.0
*1350.00	+																54	100.0
*1400.00	+																0	0.0
*1400.00	+																54	100.0
*1450.00	+																0	0.0
*1450.00	+																54	100.0
*1500.00	+																0	0.0
*1500.00	+																54	100.0
*LAST	+																0	0.0

HISTOGRAMS OF PENETRATION

1983 ASPHALT CEMENT DATA

a. AC-5

b. AC-15

c. AC-20

d. 85-100

ST. DEV.
12.813

B9

b. 1983 ASPHALT MATERIALS DATA GRADE AC-15

HISTOGRAM OF VARIABLE										PEN77		SYMBOL		COUNT		MEAN		ST.DEV.											
												X		175		84.914		7.036											
INTERVAL		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	FREQUENCY		PERCENTAGE									
NAME		+-----																											

C.1983 ASPHALT MATERIALS DATA GRADE AC-20

HISTOGRAM OF VARIABLE																PEN77		SYMBOL		COUNT		MEAN		ST.DEV.	
																		X		1317		77.212		9.599	
INTERVAL		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	FREQUENCY		PERCENTAGE					
NAME																		INT.	CUM.	INT.	CUM.				
*50.0000 +X																		1	1	1	0.1	0.1			
*55.0000 +																		0	1	0.0	0.1				
*60.0000 +XXXXXXX																		8	9	0.6	0.7				
*65.0000 +XXXXXXXXXX																		146	155	11.1	11.8				
*70.0000 +XXXXXXXXXX																		281	436	21.3	33.1				
*75.0000 +XXXXXXXXXX																		162	598	12.3	45.4				
*80.0000 +XXXXXXXXXX																		154	752	11.7	57.1				
*85.0000 +XXXXXXXXXX																		202	954	15.3	72.4				
*90.0000 +XXXXXXXXXX																		307	1261	23.3	95.7				
*95.0000 +XXXXXXXXXX																		52	1313	3.9	99.7				
*100.000 +XX																		2	1315	0.2	99.8				
*105.000 +XX																		2	1317	0.2	100.0				
*110.000 +																		0	1317	0.0	100.0				
*115.000 +																		0	1317	0.0	100.0				
*120.000 +																		0	1317	0.0	100.0				
*125.000 +																		0	1317	0.0	100.0				
*130.000 +																		0	1317	0.0	100.0				
*135.000 +																		0	1317	0.0	100.0				
*140.000 +																		0	1317	0.0	100.0				
*145.000 +																		0	1317	0.0	100.0				
*150.000 +																		0	1317	0.0	100.0				
*155.000 +																		0	1317	0.0	100.0				
*160.000 +																		0	1317	0.0	100.0				
*165.000 +																		0	1317	0.0	100.0				
*170.000 +																		0	1317	0.0	100.0				
*175.000 +																		0	1317	0.0	100.0				
*180.000 +																		0	1317	0.0	100.0				
*185.000 +																		0	1317	0.0	100.0				
*190.000 +																		0	1317	0.0	100.0				
*195.000 +																		0	1317	0.0	100.0				
*200.000 +																		0	1317	0.0	100.0				
*LAST																		0	1317	0.0	100.0				

HISTOGRAM OF VARIABLE	PEN77	SYMBOL	COUNT	MEAN	ST. DEV.
		X	54	90.037	3.608

INTERVAL		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	FREQUENCY INT.	PERCENTAGE CUM.	TOTAL FREQ.
*50.0000	+																	0	0.0	0.0
*55.0000	+																	0	0.0	0.0
*60.0000	+																	0	0.0	0.0
*65.0000	+																	0	0.0	0.0
*70.0000	+																	0	0.0	0.0
*75.0000	+																	0	0.0	0.0
*80.0000	+																	0	0.0	0.0
*85.0000	+																	0	0.0	0.0
*90.0000	+																	0	0.0	0.0
*95.0000	+																	0	0.0	0.0
*100.0000	+																	0	0.0	0.0
*105.0000	+																	0	0.0	0.0
*110.0000	+																	0	0.0	0.0
*115.0000	+																	0	0.0	0.0
*120.0000	+																	0	0.0	0.0
*125.0000	+																	0	0.0	0.0
*130.0000	+																	0	0.0	0.0
*135.0000	+																	0	0.0	0.0
*140.0000	+																	0	0.0	0.0
*145.0000	+																	0	0.0	0.0
*150.0000	+																	0	0.0	0.0
*155.0000	+																	0	0.0	0.0
*160.0000	+																	0	0.0	0.0
*165.0000	+																	0	0.0	0.0
*170.0000	+																	0	0.0	0.0
*175.0000	+																	0	0.0	0.0
*180.0000	+																	0	0.0	0.0
*185.0000	+																	0	0.0	0.0
*190.0000	+																	0	0.0	0.0
*195.0000	+																	0	0.0	0.0
*200.0000	+																	0	0.0	0.0
*LAST	+																	0	0.0	0.0

MEAN VISCOSITY, PENETRATION BY PRIMESOURCE

1983 ASPHALT CEMENT DATA

- a. AC-5
- b. AC-15
- c. AC-20
- d. 85-100

a. 1983 ASPHALT MATERIALS DATA GRADE AC-5

VARIABLE NO. NAME	GROUPING VARIABLE LEVEL	TOTAL FREQUENCY	MEAN	STANDARD DEVIATION	ST. ERR OF MEAN	COEFF. OF VARIATION	S M A L L E S T VALUE	S M A L L E S T Z-SCORE	L A R G E S T VALUE	L A R G E S T Z-SCORE	RANGE
5 AVIS140	PSOURCE	12	536.667	33.115	9.5595	0.06171	452.000	-2.56	573.000	1.10	121.000
	ARCO-3R	0									
	ARCO-PH	0									
	CHEV-LYN	0									
	CHEV-PMB	0									
	CHEV-TRY	0									
	EXXN-LIN	0									
	MAR-TON	3	514.000	53.694	31.0000	0.10446	452.000	-1.15	545.000	0.58	93.000
	PKHM-ATH	0									
	UNTED-WR	0									
	WBNK-PEN	0									
	WBNK-PMB	0									
	CIBRO-AL	0									
	CIBRO-3R	0									
	SHELL-MO	0									
	GULF-MON	0									
	PTFN-MON	0									
	BP-MONT	0									
	BP-OAK	9	544.222	23.026	7.6753	0.04231	504.000	-1.75	573.000	1.25	69.000
	PARCO-ST	0									
	ASPAS-KY	0									
	MON-PFRD	0									
6 PEN77	PSOURCE	12	164.000	12.813	3.6989	0.07813	150.000	-1.09	195.000	2.42	45.000
	ARCO-3R	0									
	ARCO-PH	0									
	CHEV-LYN	0									
	CHEV-PMB	0									
	CHEV-TRY	0									
	EXXN-LIN	0									
	MAR-TON	3	180.667	12.423	7.1725	0.06876	173.000	-0.62	195.000	1.15	22.000
	PKHM-ATH	0									
	UNTED-WR	0									
	WBNK-PEN	0									
	WBNK-PMB	0									
	CIBRO-AL	0									
	CIBRO-3R	0									
	SHELL-MO	0									
	GULF-MON	0									
	PTFN-MON	0									
	BP-MONT	0									
	BP-OAK	9	158.444	6.948	2.3161	0.04385	150.000	-1.22	173.000	2.09	23.000
	PARCO-ST	0									
	ASPAS-KY	0									
	MON-PFRD	0									

b. 1983 ASPHALT MATERIALS DATA GRADE AC-15

VARIABLE NO. NAME	GROUPING VARIABLE LEVEL	TOTAL FREQUENCY	MEAN	STANDARD DEVIATION	ST. ERR OF MEAN	COEFF. OF VARIATION	S M A L L E S T VALUE	L A R G E S T VALUE	Z-SCORE	RANGE
5 AVIS140	PSOURCE	175	1384.966	117.807	8.9054	0.08506	1042.000	1834.000	-2.91 3.81	792.000
	ARCO-3R	0								
	ARCO-PH	0								
	CHEV-LYN	0								
	CHEV-PMB	0								
	CHEV-TRY	0								
	EXXN-LIN	0								
	MAR-TON	104	1415.221	101.451	9.9481	0.07169	1042.000	1834.000	-3.68 4.13	792.000
	PKHM-ATH	0								
	UNTED-WR	25	1426.560	145.910	29.1820	0.10228	1224.000	1765.000	-1.39 2.32	541.000
	WBK-PEN	0								
	WBK-PMB	0								
	CIBRO-AL	0								
	CIBRO-3R	0								
	SHELL-MO	0								
	GULF-MON	0								
	PTFN-MON	4	1373.750	120.162	60.0810	0.08747	1262.000	1532.000	-0.93 1.32	270.000
	BP-MONT	0								
	BP-OAK	42	1286.357	78.575	12.1243	0.06108	1102.000	1522.000	-2.35 3.00	420.000
	PARCO-ST	0								
	ASPAS-KY	0								
	MON-PFRD	0								
6 PEN77	PSOURCE	175	84.914	7.036	0.5319	0.08286	59.000	114.000	-3.68 4.13	55.000
	ARCO-3R	0								
	ARCO-PH	0								
	CHEV-LYN	0								
	CHEV-PMB	0								
	CHEV-TRY	0								
	EXXN-LIN	0								
	MAR-TON	104	86.817	5.238	0.5136	0.06033	66.000	114.000	-3.97 5.19	48.000
	PKHM-ATH	0								
	UNTED-WR	25	73.760	7.055	1.4110	0.09565	59.000	85.000	-2.09 1.59	26.000
	WBK-PEN	0								
	WBK-PMB	0								
	CIBRO-AL	0								
	CIBRO-3R	0								
	SHELL-MO	0								
	GULF-MON	0								
	PTFN-MON	4	83.000	2.944	1.4720	0.03547	80.000	87.000	-1.02 1.36	7.000
	BP-MONT	0								
	BP-OAK	42	87.024	4.630	0.7145	0.05321	72.000	99.000	-3.24 2.59	27.000
	PARCO-ST	0								
	ASPAS-KY	0								
	MON-PFRD	0								

1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9
10	10	10	10	10	10
11	11	11	11	11	11
12	12	12	12	12	12
13	13	13	13	13	13
14	14	14	14	14	14
15	15	15	15	15	15
16	16	16	16	16	16
17	17	17	17	17	17
18	18	18	18	18	18
19	19	19	19	19	19
20	20	20	20	20	20

1. 1. 1. 1. 1. 1.
 2. 2. 2. 2. 2. 2.
 3. 3. 3. 3. 3. 3.
 4. 4. 4. 4. 4. 4.
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 18. 18. 18. 18. 18. 18.
 19. 19. 19. 19. 19. 19.
 20. 20. 20. 20. 20. 20.

c.1983 ASPHALT MATERIALS DATA GRADE AC-20

VARIABLE NO. NAME	GROUPING VARIABLE LEVEL	TOTAL FREQUENCY	MEAN	STANDARD DEVIATION	ST.ERR. OF MEAN	COEFF. OF VARIATION	S M A L L E S T VALUE	Z-SCORE	L A R G E S T VALUE	Z-SCORE	RANGE
5 AVIS140	PSOURCE	1317	1967.978	216.089	5.9544	0.10980	1384.000	-2.70	2998.000	4.77	1614.000
	ARCO-3R	187	1865.064	149.598	10.9397	0.08021	1511.000	-2.37	2576.000	4.75	1065.000
	ARCO-PH	12	2097.917	82.875	23.9240	0.03950	1994.000	-1.25	2229.000	1.58	235.000
	CHEV-LYN	106	1835.472	145.539	14.1360	0.07929	1576.000	-1.78	2583.000	5.14	1007.000
	CHEV-PMB	99	1842.980	144.550	14.5278	0.07843	1556.000	-1.99	2564.000	4.99	1008.000
	CHEV-TRY	67	1906.164	146.606	17.9108	0.07691	1668.000	-1.62	2308.000	2.74	640.000
	EXXN-LIN	84	1927.369	132.799	14.4896	0.06890	1414.000	-3.87	2343.000	3.13	929.000
	MAR-TON	21	1655.238	102.514	22.3705	0.06193	1384.000	-2.65	1783.000	1.25	399.000
	PKHM-ATH	146	1928.096	124.436	10.2984	0.06454	1715.000	-1.71	2304.000	3.02	589.000
	UNTED-WR	0									
	WBK-PEN	1	2257.000	0.000	0.0000	0.00000	2257.000	0.00	2257.000	0.00	0.000
	WBK-PMB	62	2065.677	179.627	22.8126	0.08696	1682.000	-2.14	2397.000	1.84	715.000
	CIBRO-AL	250	2230.684	140.038	8.8568	0.06278	1773.000	-3.27	2806.000	4.11	1033.000
	CIBRO-3R	82	2194.378	161.533	17.8384	0.07361	1806.000	-2.40	2604.000	2.54	798.000
	SHELL-MQ	14	1713.500	86.962	23.2416	0.05075	1565.000	-1.71	1848.000	1.55	283.000
	GULF-MON	0									
	PTFN-MON	0									
	BP-MONT	0									
	BP-OAK	0									
	PARCO-ST	164	1834.768	145.933	11.3955	0.07954	1565.000	-1.85	2998.000	7.97	1433.000
	ASPAS-KY	10	1953.900	206.109	65.1774	0.10549	1674.000	-1.36	2250.000	1.44	576.000
	MON-PFRD	12	1885.583	188.275	53.7729	0.09879	1749.000	-0.73	2286.000	2.15	537.000
6 PEN77	PSOURCE	1317	77.212	9.599	0.2645	0.12432	0.000	-8.04	101.000	2.48	101.000
	ARCO-3R	187	68.733	4.656	0.3405	0.06774	60.000	-1.88	90.000	4.57	30.000
	ARCO-PH	12	67.083	2.610	0.7534	0.03890	65.000	-0.80	72.000	1.88	7.000
	CHEV-LYN	106	83.000	5.880	0.5711	0.07084	65.000	-3.06	92.000	1.53	27.000
	CHEV-PMB	99	81.758	5.662	0.5691	0.06926	62.000	-3.49	92.000	1.81	30.000
	CHEV-TRY	67	84.970	4.690	0.5730	0.05520	70.000	-3.19	95.000	2.14	25.000
	EXXN-LIN	84	65.881	4.559	0.4974	0.06919	58.000	-1.73	91.000	5.51	33.000
	MAR-TON	21	78.429	4.319	0.9426	0.05507	72.000	-1.49	88.000	2.22	16.000
	PKHM-ATH	146	71.479	4.759	0.3939	0.06658	63.000	-1.78	90.000	3.89	27.000
	UNTED-WR	0									
	WBK-PEN	1	86.000	0.000	0.0000	0.00000	86.000	0.00	86.000	0.00	0.000
	WBK-PMB	62	81.355	5.214	0.6622	0.06409	65.000	-3.14	91.000	1.85	26.000
	CIBRO-AL	250	86.672	6.974	0.4411	0.08047	0.000	-12.43	101.000	2.05	101.000
	CIBRO-3R	82	85.573	4.922	0.5435	0.05751	69.000	-3.37	93.000	1.51	24.000
	SHELL-MQ	14	69.500	3.032	0.8103	0.04362	64.000	-1.81	78.000	2.80	14.000
	GULF-MON	0									
	PTFN-MON	0									
	BP-MONT	0									
	BP-OAK	0									
	PARCO-ST	164	68.476	4.821	0.3765	0.07041	56.000	-2.59	85.000	3.43	29.000
	ASPAS-KY	10	76.100	2.685	0.8492	0.03529	72.000	-1.53	81.000	1.82	9.000
	MON-PFRD	12	87.417	2.234	0.6450	0.02556	85.000	-1.08	92.000	2.05	7.000

d. 1983 ASPHALT MATERIALS DATA GRADE 85-100

VARIABLE NO. NAME	GROUPING VARIABLE LEVEL	TOTAL FREQUENCY	MEAN	STANDARD DEVIATION	ST. ERR. OF MEAN	COEFF. OF VARIATION	S M A L L E S T VALUE	Z-SCORE	L A R G E S T VALUE	Z-SCORE	RANGE
4 KVIS275	PSOURCE	54	330.278	18.727	2.5484	0.05670	297.000	-1.78	373.000	2.28	76.000
	ARCO-3R	0									
	ARCO-PH	0									
	CHEV-LYN	0									
	CHEV-PMB	0									
	CHEV-TRY	0									
	EXXN-LIN	0									
	MAR-TON	0									
	PKHM-ATH	0									
	UNTED-WR	0									
	WBNK-PEN	0									
	WBNK-PMB	0									
	CIBRO-AL	0									
	CIBRO-3R	0									
	SHELL-MO	0									
	GULF-MON	14	351.071	16.717	4.4678	0.04762	318.000	-1.98	373.000	1.31	55.000
	PTFN-MON	33	324.030	11.577	2.0153	0.03573	308.000	-1.38	366.000	3.63	58.000
	BP-MONT	7	318.143	19.548	7.3886	0.06145	297.000	-1.08	351.000	1.68	54.000
	BP-OAK	0									
	PARCO-ST	0									
	ASPAS-KY	0									
	MON-PFRD	0									
5 PEN77	PSOURCE	54	90.037	3.608	0.4910	0.04007	85.000	-1.40	100.000	2.76	15.000
	ARCO-3R	0									
	ARCO-PH	0									
	CHEV-LYN	0									
	CHEV-PMB	0									
	CHEV-TRY	0									
	EXXN-LIN	0									
	MAR-TON	0									
	PKHM-ATH	0									
	UNTED-WR	0									
	WBNK-PEN	0									
	WBNK-PMB	0									
	CIBRO-AL	0									
	CIBRO-3R	0									
	SHELL-MO	0									
	GULF-MON	14	91.143	3.110	0.8311	0.03412	86.000	-1.65	95.000	0.00	9.000
	PTFN-MON	33	89.273	2.971	0.5173	0.03329	85.000	-1.44	98.000	2.94	13.000
	BP-MONT	7	91.429	6.214	2.3488	0.06797	85.000	-1.03	100.000	1.38	15.000
	BP-OAK	0									
	PARCO-ST	0									
	ASPAS-KY	0									
	MON-PFRD	0									

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